

METHODS OF FORMING MIM TYPE CAPACITOR STRUCTURES USING
LOW TEMPERATURE PLASMA PROCESSING

ABSTRACT

5 Methods of forming metal-insulator-metal type capacitors in integrated circuit
memory devices can include crystallizing an HfO_2 dielectric layer on a lower
electrode of a capacitor structure in a low temperature plasma treatment at a
temperature in range between about 250 degrees Centigrade and about 450 degrees
Centigrade. An upper electrode can be formed on the HfO_2 dielectric layer.

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